



Serial Number 09/750,744

AF/3761

#8  
B. Webb  
9/16/02

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Hyung Byum Kim et al.

Examiner: Webb, Jamisue A.

Serial No.: 09/750,744

Art Unit: 3761

Filed: December 28, 2000

Docket No.: 13,788

For: ABSORBENT ARTICLE WITH FLUID  
INTAKE INTENSIFIER

Date: September 4, 2002

**APPEAL BRIEF**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

This Appeal Brief is filed in response to the Final Rejection dated 06/24/2002, for the above-identified application. A Notice of Appeal was filed August 21, 2002.

**REAL PARTY IN INTEREST**

The real party in interest is Kimberly-Clark Worldwide, Inc., the assignee of all rights to the invention of the above-identified application.

**RELATED APPEALS AND INTERFERENCES**

To the knowledge of appellant, appellant's legal representative, or assignee, there are no other known related appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**STATUS OF CLAIMS**

Claims 23 through 37 are pending in the application.

Claims 23 through 37 are under appeal.

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STATUS OF AMENDMENTS FILED SUBSEQUENT TO FINAL REJECTION

No amendments were filed subsequent to the Final Rejection.

SUMMARY OF THE INVENTION

The present invention provides a distinctive absorbent article (10) which includes a liquid pervious cover (21); an absorbent core (25); and an intake intensifier pledget (15) located on a central portion of the absorbent core (25). The cover (21) includes a hydroentangled, hydroapertured spun-lace material, and the pledget (15) includes a Thru-Air Bonded Carded Web material. Additionally, the Thru-Air Bonded Carded Web material has a basis weight of between about 15 g/m<sup>2</sup> and about 70 g/m<sup>2</sup>. Particular descriptions of the article can, for example, be found in the specification at page 6, lines 14-22; page 7, lines 1-19; and page 9, lines 3-7.

Further aspects of the invention are set forth in the specification and claims. In particular:

Claim 27 recites a pledget which includes a first layer and a second layer, the first layer having the Thru-Air Bonded Carded Web material, and the second layer including an airlaid nonwoven material. For example, see the description at page 3, lines 23-26.

Claim 28 recites a pledget which includes a composite of the Thru-Air Bonded Carded Web and an airlaid nonwoven material. For example, see the description at page 3, lines 23-26.

Claim 34 recites a cover wherein the hydroentangled, hydroapertured spun-lace material is rayon fiber. For example, see the description at page 4, line 16.

Claim 35 recites a cover wherein the hydroentangled, hydroapertured spun-lace material is selected from the group consisting of polyethylene terephthalate polyester, polyethylene, polypropylene and bicomponents thereof. For example, see the description at page 4, lines 18-20.

Claim 36 recites a cover wherein the hydroentangled, hydroapertured spun-lace material is a homogeneous mixture of about 70% rayon fiber and about 30% polyethylene terephthalate polyester. For example, see the description at page 4, line 17.

By incorporating its various aspects and features, alone or in combination, the article of the invention can advantageously provide a distinctive combination of rapid penetration of body fluid into the article, rapid absorption, greater retention of body fluid, less rewet, reduced lateral run-off and leakage, a more cushioned feel and less bulk.

STATEMENT OF ISSUES PRESENTED FOR REVIEW

Issue 1

Whether claims 28 and 31 are indefinite, under 35 U.S.C. §112, second paragraph.

Issue 2

Whether claims 23-33, 35 and 37 are unpatentable over U.S.P. 6,326,525 to Hamajima et al. in view of U.S.P. 5,643,240 to Jackson et al., under 35 U.S.C. §103(a).

Issue 3

Whether claims 34 and 36 are unpatentable over U.S.P. 6,326,525 to Hamajima et al. in view of U.S.P. 5,769,834 to Reiter et al. (Reiter), under 35 U.S.C. §103(a).

GROUPING OF CLAIMS FOR EACH GROUND OF REJECTION

Claims 28 and 31 have been rejected as being unpatentable under 35 U.S.C. § 112. It is respectfully submitted that the claims do not stand or fall together.

Claims 23-37 have been rejected as being unpatentable under 35 U.S.C. § 103. The following group of claims stand or fall together: Claims 23, 24, 25, 26, 29, 32, 33. In all other respects, it is respectfully submitted that the claims do not stand or fall together.

ARGUMENTS FOR REVERSAL

The claims on appeal

Claims 23 through 37 are on appeal, and are set forth in the enclosed APPENDIX 1.

Prior art relied on by the examiner

In the Final Rejection, the Examiner has relied on the following art:

U.S.P. 6,326,525 to Hamajima et al.

U.S.P. 5,643,240 to Jackson et al.

U.S.P. 5,769,834 to Reiter et al.

Arguments

For the reasons set forth below, Applicants respectfully submit that the Examiner's rejection should be reversed. It is also respectfully submitted that for the reasons set forth below, the claims do not stand or fall together.

Issue 1

Claims 28 and 31 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. It is respectfully submitted that the rejection should be reversed.

With respect to claim 28, the Examiner has asserted that “the pledget comprises a composite of an airlaid material and a TABCW” is indefinite, and that it unclear how one layer can comprise a composite of an airlaid material and a TABCW. It is respectfully submitted that the Examiner’s assertions are incorrect.

A Thru-air Bonded Carded Web is a type of web which can be produced with an airforming system, and is well known in the art. More particularly, it is a carded web where the fibers have been aligned with one another with a technique similar to that employed to card wool. Additionally, the web has been bonded with a thru-air technique. For example, the “thru-air” may be heated, and the heated air passing through the carded web can generate bonding between thermally-bondable fibers in the carded web. An airlaid nonwoven material is a more generic material which is airlaid, but may not be carded, and may not be bonded. As evidenced by Appellant’s claim 27, the Thru-air Bonded Carded Web may be configured in a first layer, and the airlaid nonwoven material may be configured in a second layer. Claim 28, however, contemplates an alternative arrangement where the Thru-air Bonded Carded Web and the airlaid nonwoven material are configured to provide a composite, but the composite is not limited to a layer structure. For example, the airlaid nonwoven material may be captured in the Thru-air Bonded Carded Web with a non-bonded mechanism, such as entanglement or the like. As a result, the composite may provide a complex, but integrated unit or “layer”.

Accordingly, it is apparent that the phrase, “a composite of said Thru-Air Bonded Carded Web and an airlaid nonwoven material”, would be readily understood by a person of ordinary skill, and that the phrases does not render the claim indefinite.

With regard to claim 31, the Examiner has asserted that the phrase, “the pledget has a first surface situated adjacent the garment-facing surface of the cover and a second surface bonded to at least one of the absorbent core or wrapping material”, is indefinite. It is respectfully submitted that the Examiner’s assertion is incorrect.

It is respectfully submitted that a claim may be as broad as the prior art allows even if the claim can be construed to cover unworkable embodiments. *In re Smyth and Shamos*, 480 F.2d. 1376, , 178 U.S.P.Q. 279 (CCPA 1973). *In re Smyth and Shamos*, observed (480 F.2d. 1376, at 1385, 178 U.S.P.Q. 279 at 287):

As we have said before, it is almost always possible to so construe a claim as to have it read on inoperative embodiments [citing case], but the alternative of requiring an applicant to be so specific in his claims "as to exclude materials known to be inoperative and [which] even those not skilled in the art would not try" would result in claims that fail to comply with 35 U.S.C § 112, second paragraph, because they would be so detailed as to obscure, rather than to particularly point out and distinctly claim the invention. [citing cases] We therefore cannot agree with the board that the rejection under the first paragraph of § 112 is any more sustainable because the broader term "fluid" included some "liquids" which might not work.

(citations omitted)

Moreover, the law does not demand that claims be limited to what has been found to work. *In re Goffe*, 542 F. 2d 564, 567, 191 U.S.P.Q. 429, 432 (CCPA, 1976).

To demand that the first to disclose shall limit his claims to what he has found will work or to materials which meet the guidelines specified for "preferred" materials in a process such as the one herein involved would not serve the constitutional purpose of promoting progress in the useful arts.

(citations omitted)

In the present situation, however, the arrangements questioned by the Examiner, are in fact, all possible. For example, if the wrapping material wraps around the absorbent core and the wrapping material has one or more apertures or openings through its thickness, the pledge can be attached to the core and adjacent the cover at the same time. Similarly, if the wrapping material is around the "entire article" and the wrapping material has one or more apertures or openings through its thickness, the pledget can be situated adjacent the garment facing surface of the cover while being attached to the wrapping element. Also, if the wrapping material has one or more apertures or openings through its thickness, the pledget can be bonded to both the garment facing surface of the topsheet and the core.

It is, therefore, clearly apparent that the phrase, "the pledget has a first surface situated adjacent the garment-facing surface of the cover and a second surface bonded to at least one of the absorbent core or wrapping material", would be readily understood by a person of ordinary skill, and that the phrases does not render the claim indefinite.

Accordingly, it is respectfully submitted that the Examiner's rejections under 35 U.S.C. §112 should be reversed.

Issue 2

It is respectfully submitted that the Examiner's rejections under 35 U.S.C. §103, based on the teachings of the cited references are not proper, and that the teachings of the cited references do not render obvious a structure having the configuration of components called for by Applicants' claimed invention. It is respectfully submitted that the Examiner has not established "*prima facie*" that a proper combination of the cited references would disclose or suggest Applicants' claimed invention.

It is well accepted that, as a minimum, a *prima facie* case of obviousness must contain the following elements:

- 1) there must be a basis in the reference for a modification;
- 2) there must be a reasonable expectation of success -- obvious to "try" is not the standard; and
- 3) the prior art must render obvious the invention as a whole.

In addition, it is not appropriate to engage in hindsight. It is inappropriate to pick and choose isolated elements from various prior art references and combine them so as to yield the invention in question when such combining would not have been an obvious thing to do at the time in question. Panduit Corporation v. Dennison Manufacturing Company, 227 USPQ 337 (Fed. Cir. 1985).

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 733 F.2d at 902, 221 USPQ at 1127. In re Fritch, 23 USPQ 2nd 1780, 1783-1784 (Fed. Cir. 1992).

It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. In re Gorman, 933 Fed. 2nd 982, 987. 18 USPQ 2d 1885, 1888 (Fed. Cir. 1991). In re Fritch, 23 USPQ 2nd 1780 at 1784 (Fed. Cir. 1992). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. In re Fine, 837 Fed. 2d at 1075, 5 USPQ 2d at 1600. In re Fritch, 23 USPQ 2nd 1780 at 1784 (Fed. Cir. 1992). Where the cited references do not teach how make the particular combinations needed to arrive at the invention called for by Applicants' claims, the claimed invention cannot be deemed "obvious". Ex parte Levengood, 1993.

It is also well established that a prior art reference must be evaluated as an entirety and that the prior art must be evaluated as a whole. W.L. Gore and Associates, Inc. v. Garlock, Inc., 220 USPQ 303 (Fed. Cir. 1983). Where neither any reference considered in its entirety, nor the prior art as a whole, suggests the combination claimed, the invention is non-obvious. Fromson v. Advance Offset Plate, Inc., 225 USPQ 26 (Fed. Cir. 1985).

In the present case, claims 23-33, 35 and 37 have been rejected under 35 U.S.C. §103 as being unpatentable over U.S.P. 6,326,525 to Hamajima et al. (hereinafter Hamajima) in view of U.S.P. 5,643,240 to Jackson et al. (hereinafter Jackson). It is respectfully submitted that the rejection should be reversed.

Hamajima describes an absorbent article **1** having a substantially elongate configuration, comprising a liquid-impermeable leakage-preventive layer **3**, and a liquid-retentive absorbent layer **2** disposed above the leakage-preventive layer **3**, wherein the absorbent layer **2** comprises a liquid-retentive absorbent member **24** and a liquid-permeable topsheet **23**, and is formed by a fixed portion **21** and one pair of left and right free edge portions **22**, the fixed portion **21** being fixed to the leakage-preventive layer **3**, the free edge portions **22** being located on opposite left and right sides in the longitudinal direction of the fixed portion **21** and each having a free end **22a**, the absorbent member **24** being present in both of the fixed portion **21** and the pair of left and right free edge portions **22**.

Hamajima, however, does not disclose or suggest an article having a cover which includes a hydroentangled, hydroapertured spun-lace material, in the configurations called for by Appellants' presented claims. To the extent that Hamajima discloses a topsheet composed of an "apertured nonwoven fabric", the disclosure is clearly insufficient to teach a cover which includes a hydroentangled, hydroapertured spun-lace material, as called for by Appellants' claimed invention. In asserting the position put forth by the Examiner, the Examiner has clearly engaged in impermissible hindsight, and has improperly used Appellants' own disclosure as a template for picking and choosing from a universe of disparate components to synthesize Appellants' claimed invention.

Hamajima also does not disclose or suggest an article which includes a pledget having a Thru-Air Bonded Carded Web material in the configurations called for by Appellants' claimed invention. Neither does Hamajima disclose or suggest an article which includes a Thru-Air Bonded Carded Web material having a basis weight of between about 15 g/m<sup>2</sup> and about 70 g/m<sup>2</sup>, in the configurations called for by Appellants' presented claims. Additionally, Hamajima

does not disclose or suggest an article which includes a pledget having a composite of the Thru-Air Bonded Carded Web and an airlaid nonwoven material, as called for by particular claims of Appellants. Neither does Hamajima disclose or suggest an article having a cover wherein the hydroentangled, hydroapertured spun-lace material is rayon fiber, or wherein the hydroentangled, hydroapertured spun-lace material is selected from the group consisting of polyethylene terephthalate polyester, polyethylene, polypropylene and bicomponents thereof, or wherein the hydroentangled, hydroapertured spun-lace material is a homogeneous mixture of about 70% rayon fiber and about 30% polyethylene terephthalate polyester, as called for by particular claims of Appellants.

Recognizing that Hamajima does not teach Appellants' claimed invention, the Examiner's rejection has been based upon a combination of Hamajima with U.S.P. 5,643,240 (Jackson).

Jackson describes a combination apertured film and lofty fibrous nonwoven web separation layer which is particularly well suited for use as, among other things, a body side liner for personal care absorbent articles such as sanitary napkins and the like. When used in such applications, the material of the present invention has excellent liquid penetration rates and resists rewet of the surface of the material.

Jackson, however, fails to cure the deficiencies of Hamajima. A proper combination of Hamajima and Jackson would still fail to disclose or suggest an article having a cover which includes a hydroentangled, hydroapertured spun-lace material, as called for by Appellants' presented claims. Additionally, a proper combination of Hamajima and Jackson would not disclose or suggest an article which includes a pledget having a composite of the Thru-Air Bonded Carded Web and an airlaid nonwoven material, as called for by particular claims of Appellants. Neither does a proper combination of Hamajima and Jackson disclose or suggest an article having a cover wherein the hydroentangled, hydroapertured spun-lace material is rayon fiber, or wherein the hydroentangled, hydroapertured spun-lace material is selected from the group consisting of polyethylene terephthalate polyester, polyethylene, polypropylene and bicomponents thereof, or wherein the hydroentangled, hydroapertured spun-lace material is a homogeneous mixture of about 70% rayon fiber and about 30% polyethylene terephthalate polyester, as called for by particular claims of Appellants. As a result, when compared to Appellants' claimed invention, the structures taught by a proper combination of Hamajima and Jackson would remain less able to provide desired combinations of rapid penetration of body fluid into the article, rapid absorption, greater retention of body fluid, less rewet, reduced lateral



run-off and leakage, cushioned feel and reduced bulk. It is, therefore, readily apparent that a proper combination of Hamajima and Jackson would not teach Appellants' claimed invention.

Accordingly, it is respectfully submitted that the rejection under 35 U.S.C. §103 should be reversed.

### Issue 3

Claims 34 and 36 have been rejected under 35 U.S.C. §103 as being unpatentable over Hamajima in view of U.S.P. 5,769,834 to Reiter et al. (hereinafter Reiter). It is respectfully submitted that the rejection should be reversed.

Reiter describes an absorbent article useful for absorbing bodily fluids discharged by the wearer of the article. The absorbent article comprises a fluid pervious topsheet, a fluid impervious backsheet affixed to the topsheet, an absorbent core disposed between the topsheet and the backsheet, and a resilient tubular member disposed between the topsheet and the backsheet for transporting the fluids to a predetermined region of the core. The tubular member has a plurality of fluid inlets and a plurality of fluid outlets, the inlets and outlets providing fluid communication between the interior and exterior of the tubular member. Discharged fluids may be transported from regions adjacent the inlets into the interior of the tubular member, and thereafter through the outlets to the predetermined regions of the core adjacent the outlets, thereby rapidly transporting the fluids to the predetermined region of the core. The inlets are normally open and the outlets are normally closed, however compression of the tubular member causes the inlets to close and the outlets to open, thereby permitting the desired fluid movement. Decompression and compression of the tubular member may be accomplished by the normal bodily movements of the wearer.

Reiter, however, fails to cure the deficiencies of Hamajima. A proper combination of Hamajima and Reiter would still fail to disclose or suggest an article having a cover which includes a hydroentangled, hydroapertured spun-lace material, as called for by Appellants' presented claims. Additionally, a proper combination of Hamajima and Reiter would not disclose or suggest an article which includes a pledget having a composite of the Thru-Air Bonded Carded Web and an airlaid nonwoven material, as called for by particular claims of Appellants. Neither does a proper combination of Hamajima and Reiter disclose or suggest an article having a cover wherein the hydroentangled, hydroapertured spun-lace material is rayon fiber, or wherein the hydroentangled, hydroapertured spun-lace material is selected from the group consisting of polyethylene terephthalate polyester, polyethylene, polypropylene and

bicomponents thereof, or wherein the hydroentangled, hydroapertured spun-lace material is a homogeneous mixture of about 70% rayon fiber and about 30% polyethylene terephthalate polyester, as called for by particular claims of Appellants. As a result, when compared to Appellants' claimed invention, the structures taught by a proper combination of Hamajima and Reiter would remain less able to provide desired combinations of rapid penetration of body fluid into the article, rapid absorption, greater retention of body fluid, less rewet, reduced lateral run-off and leakage, cushioned feel and reduced bulk. It is, therefore, readily apparent that a proper combination of Hamajima and Reiter would not teach Appellants' claimed invention.

Accordingly, it is respectfully submitted that the rejection under 35 U.S.C. §103 should be reversed.

It is respectfully submitted that none of the cited references, or any proper combination thereof, would disclose or suggest the changes and modifications needed synthesize the article called for by Applicants' claims. Only by impermissibly using Applicants' own disclosure as a guide for picking and choosing disparate components would a person of ordinary skill be led to the changes and modifications needed to construct the invention called for by Appellants' claims.

It is, therefore, readily apparent that none of Hamajima, Jackson, Reiter or any proper combination thereof would disclose or suggest the invention called for by Appellants' claims. Accordingly, the rejection of the claims as being unpatentable over these references should be reversed.

## CONCLUSION

For the reasons set forth in the above remarks, it is respectfully submitted that the Examiner's rejections under 35 U.S.C. §112 should be reversed. Additionally, it is respectfully submitted that the Examiner's rejections under 35 U.S.C. §103 based upon Hamajima, Jackson and Reiter, or any proper combination thereof, should also be reversed. It is respectfully submitted that Applicants' claimed invention is neither expressly taught by nor inherent in the cited references. Furthermore, the Examiner has not established a *prima facie* case that the particular configurations of components called for by Applicants' claims would be suggested by a proper combination of the cited references. To the contrary, it is readily apparent that when each cited reference is considered in its entirety and each reference is taken as a whole, a proper combination of the cited references would not teach Applicants' claimed invention. Only in light of Applicants' present disclosure and the impermissible use of hindsight would a person

of ordinary skill be rejections should be reversed. directed to the significant changes and modifications needed to reconfigure the various components to arrive at Applicants' claimed invention. It is, therefore, readily apparent that the cited references do not render unpatentable the invention called for by Applicants' claims.

Accordingly, it is respectfully submitted that claims Claims 23 through 37 are in allowable condition, and that the Examiner's rejections should be reversed.

Respectfully submitted,

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**CERTIFICATE OF MAILING**

I, Catherine E. Wolf, hereby certify that on September 4, 2002, this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231

By: Catherine E. Wolf  
Catherine E. Wolf

APPENDIX 1

23. An absorbent article, comprising  
a liquid pervious cover;  
an absorbent core; and  
an intake intensifier pledget located on a central portion of the absorbent core;  
wherein  
the cover includes a hydroentangled, hydroapertured spun-lace material;  
the pledget includes a Thru-Air Bonded Carded Web material; and  
the Thru-Air Bonded Carded Web material has a basis weight of between about 15 g/m<sup>2</sup>  
and about 70 g/m<sup>2</sup>.
24. The absorbent article of claim 23, wherein the Thru-Air Bonded Carded Web material provides a low densified, lofty, Thru-Air Bonded Carded Web.
25. The absorbent article of claim 23, wherein the Thru-Air Bonded Carded Web material comprises a staple fiber having a denier of between about 3 and about 10.
26. The absorbent article of claim 23, wherein the Thru-Air Bonded Carded Web material comprises an Ultra-Bulky bicomponent fiber or composites thereof.
27. The absorbent article of claim 23, wherein the pledget includes a first layer and a second layer, the first layer having said Thru-Air Bonded Carded Web material and the second layer including an airlaid nonwoven material.
28. The absorbent article of claim 23, wherein the pledget comprises a composite of said Thru-Air Bonded Carded Web and an airlaid nonwoven material.
29. The absorbent article of claim 23, wherein the absorbent core comprises a material selected from the group consisting of a composite of superabsorbent material and pulp, a tissue, a non-woven material, and a mixture of fluff and a superabsorbent material.

30. The absorbent article of claim 23, wherein the pledget has a length of at least about 50 mm, and a width of from about 30 to about 60 mm.
31. The absorbent article of claim 23, further comprising a wrapping material, wherein the pledget has a first surface situated adjacent the garment-facing surface of the cover and a second surface bonded to at least one of the absorbent core or the wrapping material.
32. The absorbent article of claim 23, further comprising a fluid distribution layer.
33. The absorbent article of claim 23, further comprising an embossed channel having a width of less than about 1 cm, and situated adjacent the periphery of the pledget.
34. The absorbent article of claim 23, wherein the hydroentangled, hydroapertured spun-lace material is rayon fiber.
35. The absorbent article of claim 23, wherein the hydroentangled, hydroapertured spun-lace material is selected from the group consisting of polyethylene terephthalate polyester, polyethylene, polypropylene and bicomponents thereof.
36. The absorbent article of claim 23, wherein the hydroentangled, hydroapertured spun-lace material is a homogeneous mixture of about 70% rayon fiber and about 30% polyethylene terephthalate polyester.

37. An absorbent article, comprising a cover, a first absorbent layer and a second absorbent layer;  
the first absorbent layer situated between the cover and the second absorbent layer;  
the cover including a hydroentangled, hydroapertured spun-lace material;  
the first absorbent layer including a Thru-Air Bonded Carded Web material;  
the second absorbent layer including a Thru-Air Bonded Carded Web material; and  
the Thru-Air Bonded Carded Web material in at least one of the first and second  
absorbent layers having a basis weight of between about 15 g/m<sup>2</sup> and about  
70 g/m<sup>2</sup>, and having a staple fiber that has a denier of between about 3 and  
about 10.